

**REMARKS**

Claim 1, 5 and 6 have been amended to more clearly define the subject matter which Applicant regards as the invention and to correct informalities. Support for amended Claim 1 can be found on page 9, lines 30-36, page 10, lines 1-11 and page 22, lines 1-6. Support for amended Claim 5 can be found on page 13, lines 24-26. Support for amended Claim 6 can be found on page 15, lines 8-10. Thus, no new matter has been added. Claims 1-7 and 18-19 are pending.

**Response to Claim Objections**

Claim 5 is objected to because of informalities.

As noted, Claim 5 has been amended to correct a typographical error. Accordingly, withdrawal of the objection is respectfully requested.

**Response to Claim Rejections Under § 112**

Claims 1-7, 18 and 19 are rejected under 35 U.S.C. § 112, as being indefinite. Specifically, the Examiner considered the term “device side surface” as recited in Claim 1 as originally filed to lack sufficient antecedent basis, as it is not clear which of the multiple side surfaces Claim 1 refers to. Additionally, the Examiner considered that Claim 1 also fails to identify the direction of the recited “side direction of the device,” given that the device naturally has multiple side surfaces, including at least top and bottom ones, and lateral side ones as well. Further, it was not clear to the Examiner whether the recited “side direction” is a direction along the direction of an edge of the side surface or along the normal direction of the side surface.

In response, Claims 1, 5 and 6 have been amended to more clearly define the subject matter which Applicant regards as the invention. Specifically, Claim 1 has been amended to recite that the device comprises a substrate having a major surface and a side surface and having

a light-emitting layer provided on the major surface of the substrate. Further, at least part of the substrate portion of the device side surface has recessed portions 5 inwardly extending in a side direction of the device (as shown in Fig. 2).

It is respectfully submitted that the claims as amended fully comply with 35 U.S.C. § 112, and withdrawal of the foregoing rejection is respectfully requested.

**Response to Claim Rejections Under § 102 and § 103**

Claims 1-5, 18 and 19, insofar as being in compliance with 35 U.S.C. § 112, were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,924,513 to Akaike et al.

Claims 6 and 7, insofar as being in compliance with 35 U.S.C. § 112, were rejected under 35 U.S.C. § 103(a) as being unpatentable by Akaike.

Applicants traverse, and respectfully request the Examiner to reconsider for the following reasons.

The present claims relate to a compound semiconductor light-emitting device, wherein at least part of the substrate portion of the device side surface has recessed portions inwardly extended in a side direction of the device and wherein the recessed portions have a circular shape in cross-section. *See*, page 22, lines 1-6.

Akaike discloses a LED chip that is fabricated from an LED wafer (semiconductor substrate) using GaP for a base substrate 41 and InGaAlP for a light emitting layer 42. The hexahedral LED chip includes a rectangular top surface (first principal surface) 15, a rectangular bottom surface (second principal surface) 10 and first through fourth side surfaces 11, 12, 13, and 14.

In addition, Akaike discloses that all of the side surfaces 11 through 14 are constructed or designed with planes having crystal orientations corresponding or close to the  $\{111\}$ P planes. Accordingly, each of the side surfaces 11 through 14 exhibits a rough or "saw-tooth" surface with an interval between adjoining projecting points of the rough surface, "surface roughness interval," of, for example, approximately 1  $\mu\text{m}$ , but a range of about 0.5 and 5  $\mu\text{m}$ , should have similar effects. *See*, col. 4, lines 52-63. Akaike fails to disclose or suggest a device wherein the side surface has recessed portions inwardly extended in a side direction and wherein the recessed portions have a circular shape in cross-section.

Accordingly, Akaike fails to anticipate or render obvious the present claims. Withdrawal of the foregoing rejections is respectfully requested. Withdrawal of all rejections and allowance of Claims 1-7, 18 and 19 is earnestly solicited.

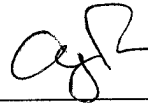
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111  
Application No.: 10/591,076

Attorney Docket No.: Q80719

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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